

DOCUMENT RESUME

ED 307 234

SP 031 137

AUTHOR Sykes, Gary; Wilson, Suzanne M.
TITLE Professional Standards for Teaching: The Assessment of Teacher Knowledge and Skills.
INSTITUTION Appalachia Educational Lab., Charleston, W. Va.
SPONS AGENCY Office of Educational Research and Improvement (ED), Washington, DC.
PUB DATE Aug 88
NOTE 38p.
AVAILABLE FROM Appalachia Educational Laboratory, Inc., P.O. Box 1348, Charleston, WV 25325 (\$4.50).
PUB TYPE Reports - Descriptive (141)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Elementary Secondary Education; Higher Education; National Programs; *Policy Formation; Schools of Education; Standardized Tests; *State Standards; *Teacher Certification; Teacher Effectiveness; *Teacher Evaluation; *Teacher Qualifications
IDENTIFIERS *National Board for Professional Teaching Standards

ABSTRACT

A report is given of the work of the National Board for Professional Teaching Standards and the implications of introducing a new status--the board-certified teacher--into the educational system. The newly formed board will sponsor the development of procedures for the voluntary certification of teachers to a standard of advanced competence--a step beyond simple state licensure. The advanced certification is to be controlled by the profession, not by the state, and it is voluntary, not mandatory. It aims not at entry-level, safe practice, but at advanced levels of knowledge and skill. It should accommodate and encourage innovation and change within the field. A description is given of the teacher assessment project which was created to explore and generate alternative strategies for assessing teachers knowledge and skill. A discussion is presented on the possible consequences for educational policy and teacher education of introducing the concept of board-certified teachers into the educational system. (JD)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

PROFESSIONAL STANDARDS FOR TEACHING:
THE ASSESSMENT OF TEACHER KNOWLEDGE AND SKILL

by

Gary Sykes
Suzanne M. Wilson
Michigan State University

Policy and Planning Center
Appalachia Educational Laboratory
P. O. Box 1348
Charleston, West Virginia 25325

August 1988

Policy Issues are prepared by the Policy and Planning Center at the Appalachia Educational Laboratory in response to specific requests from state-level policymakers. The Center's purpose is to provide information to decisionmakers as they consider issues. The papers synthesize current thinking and practice on the particular topic. They typically provide a definition of the problem/issue area, discuss what is known from research, review what other states are doing, and discuss implications for policy.

The Appalachia Educational Laboratory (AEL), Inc., works with educators in ongoing R & D-based efforts to improve education and educational opportunity. AEL serves as the Regional Educational Laboratory for Kentucky, Tennessee, Virginia, and West Virginia. It also operates the ERIC Clearinghouse on Rural Education and Small Schools. AEL works to improve:

- professional quality,
- curriculum and instruction,
- community support, and
- opportunity for access to quality education by all children.

Information about AEL projects, programs, and services is available by writing or calling AEL, Post Office Box 1348, Charleston, West Virginia 25325; 800/624-9120 (outside WV), 800/344-6646 (in WV), and 347-0400 (local).

This publication is based on work sponsored wholly or in part by the Office of Educational Research and Improvement, U.S. Department of Education, under contract number 400-86-0001. Its contents do not necessarily reflect the views of OERI, the Department, or any other agency of the U S. Government.

AEL is an Affirmative Action/Equal Opportunity Employer.

TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY	iii
INTRODUCTION	1
CERTIFICATION VERSUS LICENSURE	1
A NATIONAL BOARD FOR TEACHING	3
THE TEACHER ASSESSMENT PROJECT	4
Underlying Assumptions.	5
Sample Exercises.	7
POLICY IMPLICATIONS.	11
REFERENCES	16
APPENDIX: The Consortium Report	17

EXECUTIVE SUMMARY

Policymakers, teacher educators, and teachers alike share concern about methods for determining teaching skills. These concerns get translated into standardized tests for minimal competency or direct observation of teaching. Several states, including Florida, Georgia, Kentucky, and Virginia, have begun exploring more extensive and elaborate systems for evaluating teacher competencies. Moreover, the newly created National Board for Professional Teaching Standards has initiated a research program to explore alternative strategies for assessing teacher knowledge and skill. In the following pages, Gary Sykes and Suzanne M. Wilson of Michigan State University report on the board's work and discuss the implications of introducing a new status--the board-certified teacher--into the educational system.

Certification vs. Licensure

During the past five years, many states have developed new assessment procedures to use in licensing public school teachers. Educators and policymakers alike recognize the serious limitations of current procedures and seek alternatives that will produce more valid and reliable information about a person's capacity to teach.

The licensure standard itself--most states' current measure of competence--constitutes a limitation on the development of more sophisticated forms of assessment. Occupational licensure of any kind is a state function designed to protect the public. It is a standard of

minimal competence to practice and is inherently conservative. Licensure tests typically rely on a job analysis as the basis for the assessment, a response to legal requirements that tests must be job related. Such requirements protect fair access to occupations but also enshrine the status quo. Many professions, therefore, supplement the licensure standard with some form of advanced certification, which differs from licensure in four ways:

1. It is controlled by the profession, not by the state.
2. It is voluntary, not mandatory.
3. It aims not at entry-level, safe practice, but at advanced levels of knowledge and skill.
4. It accommodates and can encourage innovation and change within the field.

Other professions' use of certification defines, for both the public and the profession, what constitutes superior levels of competence. No parallel has existed in education--until now.

What Will Board Certification Involve?

The newly formed National Board for Professional Teaching Standards will sponsor the development of procedures for the voluntary certification of teachers to a standard of advanced competence. This 65-member board includes a majority of practicing teachers, representatives of school boards and administrators, teacher educators and higher education leaders, state policymakers, corporate leaders, and elected officials. Initial thinking is that teachers who have taught for at least 3-5 years would seek board certification, so that the process would not be associated with state prerogatives to license teachers.

Board certification is being conceptualized as a staged process in which teachers would participate over time. For example, prospective teachers would take a series of traditional objective tests about subject matter, pedagogy, curriculum, or learning theories immediately upon their graduation from undergraduate and preservice programs. During a second stage, which would be based in the schools where they serve a supervised residency, teachers would participate in activities designed to document their ability to teach. A final stage would take place in an assessment center, where candidates for the board would engage in a series of exercises designed to evaluate their professional knowledge and skill across contexts.

The Teacher Assessment Project, a research and development initiative based at Stanford University under the direction of Lee Shulman, was created to explore and generate alternative strategies for assessing teacher knowledge and skill. While the national board will eventually determine the form and content of the assessment, this project is focused on the development of prototypes for teacher assessment that may serve as working models for the board.

What has emerged from the project's work thus far is a set of exercises that might be used at an assessment center. These exercises are activities that have been designed to tap the knowledge and skills that inform the work of teachers. Exercises are based on teacher work activities--e.g., planning lessons, evaluating textbooks, critiquing a videotape of another teacher's instruction, and grading students' papers. The exercises range in length from 45 minutes to 3 hours; they also vary

in form--some involve teachers working together, others involve interviews, still others involve teaching small groups of student actors. The products of the exercises also vary--in some, teachers produce written products such as lesson plans or evaluations of textbooks; in others, the product is a videotape of a teacher's performance or an audiotape of a teacher's responses in an interview.

How Might This New Teacher Status Affect Education?

If the new status of the board-certified teacher is introduced into the educational system within the next decade, how might various interests begin to make use of this new status?

First, if localities come to value the new status and seek to encourage teachers to become board-certified, they may begin to provide incentives. For example, districts might add a new column on the salary schedule for board certification, tie advancement in teaching to board certification, or require board certification for tenure or for such positions as department chair or master teacher.

Board certification could also influence teacher education and higher education faculty. The new assessments may come to influence teacher education curriculum, with students practicing the kinds of exercises utilized in the assessment center as part of their preparation. Schools and colleges of education may encourage at least some of their faculty to become board-certified, particularly those who teach methods courses. Much depends on whether the new status gains widespread credibility with teachers and with the public.

As board certification becomes a new and convincing proxy for teacher quality, state and local policymakers may create incentives and requirements to increase the number of board-certified teachers. The certification standard might also influence the licensure standard in some states: state boards of education might tie permanent licensure to board certification or revise licensure procedures to become board compatible.

These potential developments all raise issues of equity. If past experience with testing is indicative, then disparities in access to board certification may open up along lines of race, class, and locality. This will raise serious doubts about the value of the process.

As the prospect of board certification draws closer, states and districts can arrange opportunities for teachers who wish to begin preparing for board certification. Several states have already responded to these new visions of teacher assessment. Connecticut and California, for example, have initiated a consortium with support from the National Governors' Association for states interested in developing board-compatible licensure procedures.

Establishment of the National Board for Professional Teaching Standards will influence the teaching field in at least two ways. One concerns the introduction of a new status--the board-certified teacher--into the schools, and how states, districts, and schools might use this new status. This development raises issues for state and local policy, for school organization and relationships within schools, for educational equity, and for the allocation and distribution of resources.

The second line of influence concerns the reconceptualization of teaching and its assessment, as represented in standards of teaching, the curriculum of teacher education, and the very language used to describe and evaluate teaching.

Both are of great moment to the future of teaching and deserve careful attention. Ultimately, though, the proof of this pudding must be in the tasting. Teachers who seek board certification must find the procedures credible and related to their conceptions of excellence in teaching. Policymakers and citizens must come to value the knowledge and skills assessed. Board-certified teachers must exemplify technical competence and professional responsibility. The value in this reform, then, is that it must prove itself. It is, after all, an invitation, not a mandate.

INTRODUCTION

During the past five years, many states--most prominently the southern states--have begun developing new assessment procedures for the licensing of public school teachers. Following the turn to competency tests for teachers, states such as Georgia, Virginia, Florida, and Oklahoma have added more extensive requirements including in-class observation and supervised internships. These developments indicate the growing interest in creating more sophisticated forms of assessment for teaching. Policymakers today recognize the serious limitations of paper-and-pencil, multiple-choice tests, as well as direct observation evaluation systems. They seek alternatives that will produce more valid and reliable information about the capacity to teach.

CERTIFICATION VERSUS LICENSURE

The licensure standard itself constitutes a limitation on what may be accomplished. Occupational licensure is a state function designed to protect the public. It is a standard of minimal competence to practice, and is inherently conservative. Licensure tests typically rely on a job analysis as the basis for the assessment, a response to legal requirements that tests must be job related. Such a requirement protects fair access to occupations but also enshrines the status quo. Many professions, therefore, supplement the licensure standard with some form of advanced certification, which differs from licensure in four ways:

1. The certification standard is controlled by the profession, not by the state. Certification constitutes a

claim to advanced or specialized competence made by the profession. This is the pattern in medicine, dentistry, nursing, accounting, and architecture, to name a few.

2. Certification is voluntary, not mandatory. An individual may practice medicine or architecture without being professionally certified. But certification constitutes advanced standing in the field and brings certain advantages.
3. Certification aims not at entry-level, safe practice, which is a minimal standard, but at advanced levels of knowledge and skill, often but not exclusively associated with some form of specialization.
4. Certification accommodates and can encourage innovation and change within the field. The legal requirements are less stringent than for entry-level licensure so the standard may respond to promising new developments, rather than strictly reflect common practice.

To summarize, what have arisen in the educational field are minimal not professional standards. No mechanism exists by which the teaching profession might, in fact, profess, no set of standards for what would constitute advanced or superior competence in the field of teaching. Minimum, entry-level standards serve the useful purpose of screening out those who are unqualified to teach. But such a standard cannot progressively incorporate advances in the knowledge base nor define, for public and profession alike, what constitutes superior levels of knowledge and skill. Other professions have utilized certification to accomplish this, but there has been no parallel in education. Until now.

A NATIONAL BOARD FOR TEACHING

The newly formed National Board for Professional Teaching Standards¹ will sponsor the development of procedures for the voluntary certification of teachers to a standard of advanced competence. This 65-member board includes a majority of practicing schoolteachers, representatives of school boards and administrators, teacher educators and higher education leaders, state policymakers, corporate leaders, and elected officials. The board represents the teaching profession and its interest in developing professional standards of practice. Initial thinking is that teachers who have taught for at least 3-5 years would sit for the boards, so that the process would not be associated with state prerogatives to license teachers. The board has not yet developed policies on certification, but preliminary research and development is underway to explore new forms of teacher and teaching assessment that may be utilized by the board in its certification process.

Currently, however, board certification is being conceptualized as a staged process in which teachers would participate over time. For example, immediately upon their graduation from undergraduate and preservice programs, prospective teachers would take a series of traditional objective tests about subject matter, pedagogy, or

¹ The National Board for Professional Teaching Standards was officially inaugurated in the fall of 1987. It grew out of recommendations made by the Carnegie Task Force on the Teaching Profession, which issued the widely read report A Nation Prepared (1986). The Board includes most of the members of the original task force who helped craft the bylaws and selection procedures that led to the formation of the full board.

curriculum. During a second stage, which would be based in the schools where they serve a supervised residency, candidates for the board would participate in activities designed to document their ability to teach. During this stage, candidates would develop a portfolio containing materials produced in their work (e.g., lesson or unit plans, assignments and activities, or handouts), or other documentary evidence (e.g., peer or administrator evaluations, samples of student work, or videotapes of their teaching). A final stage would take place in an assessment center, where candidates for the board would engage in a series of exercises designed to evaluate their professional knowledge and skill across contexts.

THE TEACHER ASSESSMENT PROJECT

The Teacher Assessment Project, a research and development initiative based at Stanford University, was created to explore and generate alternative strategies for assessing teacher knowledge and skill. The project is funded, in part, by the Carnegie Corporation of New York; Lee S. Shulman is principal investigator. During the first two years of the project, the research team focused on the development of prototypes for the content areas of secondary school social studies and upper elementary school mathematics. Beginning in January 1988, the project added two new content foci, biology teaching at the secondary level and the teaching of literacy in elementary schools.² While the

² For a more complete description of the project's research agenda and theoretical framework, see Shulman (1987a, b) and Shulman and Sykes (1986).

national board will eventually determine the form and content of the assessment, this project is focused on the development of prototypes of teacher assessment that may serve as working models for the board.

Underlying Assumptions

The work of the Teacher Assessment Project is based on a number of assumptions. First and foremost, we assume that there exists a professional knowledge of teaching--that teachers draw upon knowledge of students, subject matter, curricula, and contexts in their work. Moreover, we assume that this knowledge is acquired from a variety of sources, among them practical experience in schools, interactions with professional colleagues, the academic disciplines, and educational scholarship.

While we presume a knowledge base for teaching, we also acknowledge that much of that knowledge has yet to be codified. Even though the work of educational researchers has informed our thinking about teaching and teachers in significant ways, we have failed to capture much of the practical knowledge that experienced teachers acquire over time. Yet, if knowledge and skill contribute to practice, it is important to find ways to assess them in professional examinations for quality teaching. Therefore, any effort to create assessments of teacher knowledge must include a component that focuses on the documentation and codification of the practical professional knowledge of experienced teachers.

In the work of the Teacher Assessment Project, we have developed several strategies for tapping and codifying the practical professional

knowledge of teachers. We have interviewed and observed a small set of exemplary teachers in an attempt to understand how they think about their teaching while planning, teaching, and reflecting on instruction. These wisdom-of-practice studies have informed both the development of the exercises and the further development of our conceptualization of the knowledge base of teaching (Shulman 1986, 1987; Wilson, Shulman, & Richert, 1987). In addition, teachers are represented on all advisory and consulting boards. Finally, experienced teachers have served as researchers on the staff, bringing their insights from inside the work of teaching to the task of assessing quality teaching.

A third assumption that permeates our work is that, while there may be a common knowledge base, knowledge can inform practice in multiple ways. Good teaching takes many forms; anyone assessing teachers must find ways to accommodate that variety. Our strategy has been to emphasize not only teachers' behavior in classrooms but also the rationale they provide for their actions, for we assume that teachers should be able to justify their actions.

Finally, we assume that subject matter is an essential aspect of teaching that, curiously, has been neglected in the current conceptions of teaching based on generic skills that undergird most systems of teacher evaluation. This is not to say that we believe it to be alone at the heart of pedagogy, but simply that it is an integral component. Teachers have multiple goals--some related to comprehension of the subject matter, some related to the development of other types of understanding. Yet, whatever the goal, subject matter frequently serves

as the vehicle by which teachers pursue their aims. In our previous work, both with novice and experienced teachers, we have found that the study of pedagogy and content, in tandem, provides a richer and far more complete portrait of teacher knowledge and cognition than an examination that treats pedagogy as generic and subject matter as a context factor (Shulman, 1986, 1987b). Our account of teaching, then, places weight on a teacher's knowledge of and skill in conveying subject matter to diverse groups of students.

Sample Exercises

What has emerged from the work of the Teacher Assessment Project thus far is a set of exercises that might be used at an assessment center. These exercises are designed to tap the full range of knowledge, skill, disposition, and belief that informs the work of teachers.

One exercise developed for both elementary mathematics and secondary social studies is called "teaching a familiar lesson." Prior to coming to the assessment center, teachers receive word that they will be asked to teach a lesson of their choice to a small group of student actors. The exercise is conducted individually with each teacher. On the day of the assessment, the exercise begins with a brief interview. The teacher is asked to describe the lesson as envisioned, explain its aims, and discuss anticipated student responses. After this pre-instruction interview, the teacher is taken to a room to teach the lesson to a small group of students. When the lesson is over, a second interview is conducted; this time the teacher is asked to reflect on how the lesson went, what changes were made and why, and what might be done differently

in the future. Another form of this exercise might require candidates to bring to the assessment center a videotape of themselves teaching a familiar lesson to their own students. The interviews would remain much the same, but teachers could then bring to bear their knowledge of particular students as they reflected on their teaching.

A second exercise, developed specifically for elementary mathematics teachers, is entitled "shortcuts." In this exercise, created by a group of experienced teachers, candidates discuss how they would respond to students who use different types of shortcuts when doing cross-multiplication problems, e.g., $5/6 = ?/18$. The teachers who developed this exercise identified three shortcuts that students frequently use, some of which are less sound than others, i.e., one shortcut may not work for all cases of cross multiplication. During the exercise, individual teachers are presented with the three shortcuts and asked to explain whether or not the method is mathematically sound, and to discuss how, why, and when such shortcuts could be used in teaching.

In both exercises just described, a candidate interacts individually with an examiner.³ While examiners will be needed to evaluate the performance of candidates on all exercises, not every exercise requires that examiners play a central role. Another exercise, for example, developed for secondary social studies teachers, involves a group of teachers planning a unit of instruction. As we talked with experienced

³ Once the certification process is in place, it is assumed that most examiners will themselves be board-certified teachers.

social studies teachers about their work, we found that many appreciate the opportunity to collaborate with colleagues--to share on a regular basis their knowledge of subject matter and of teaching. Experienced teachers consider such experiences important for their professional development. Consequently, this exercise involves four teachers who meet to plan a unit of instruction. At the beginning of the exercise, the examiner explains that the group should produce an outline of the main features for a particular unit--its goals and objectives, the content to be covered, the way the information will be presented, and the way in which the class will be organized. The teachers are then left to plan. The products of the exercise include a videotape of the planning session and a written outline. In this example, the role of the examiner is very different from the first example; no interview is conducted, and the examiner is unintrusive.

This exercise raises an issue that is fundamental to the work of the Teacher Assessment Project. Should exercises reflect the status quo in schools or should they, on some occasions, represent a vision of the possible? While most of our teachers acknowledged that the majority of their colleagues work in isolation, their testimony suggested that the opportunity to collaborate made them better teachers. As the board selects exercises to use in its assessment, members will have to struggle with the issue of opting for exercises that reflect the present reality of schools or exercises that reflect collective visions of what they hope schools might become.

Other exercises developed thus far involve critiquing textbooks, discussing the use of documentary source materials in history teaching,

planning lessons, critiquing a videotape of another teacher's instruction, grading students' papers, and discussing the use of manipulatives in mathematics teaching. The exercises range in length from 45 minutes to 3 hours; they also vary in form--some involve teachers working together, others involve interviews, still others involve teaching small groups of student actors. The products of the exercises also vary--in some, teachers produce written products such as lesson plans or evaluations of textbooks; in others, the product is a videotape of a teacher's performance or an audiotape of teacher responses in an interview.

The exercises are based on teacher work activities--planning, teaching, preparing materials, responding to students, reflecting on experience. In any one exercise, teachers may draw upon their knowledge of pedagogy, subject matter, curriculum, learners, or learning. As a result, each exercise has the potential for serving as a window through which we can see what teachers know about teaching and how they choose to use that knowledge. The knowledge and skills a particular exercise taps are largely determined by the questions that teachers are asked, either in an interview or on a response form. For instance, we might opt to emphasize knowledge of subject matter and pedagogical content in the documentary history exercise, but emphasize knowledge of curriculum in the critique of the textbook. The questions and probes we elect to use in the exercises reflect those emphases.

But just as every exercise has potential for tapping many types of knowledge, no one exercise can be treated as the sole source of

information about what a teacher knows. Simply because a candidate's knowledge of learners appears underdeveloped in one exercise, we cannot assume that the candidate, generally, has little knowledge of learners. Thus, while a candidate is evaluated on each exercise, the final evaluation is based on the constellation of performances, not on responses in one specific activity.

Although these exercises offer alternative, innovative ways of conceptualizing the assessment of teaching knowledge and skill, they alone are not sufficient. Because teaching is an activity that takes place in a particular context, assessment center exercises must be complemented with activities that take place over time in real classrooms with real students. The board-certification process would occur in stages and would include more conventional assessments like multiple-choice and paper-and-pencil tests, as well as on-site activities similar to those described here. This full range of activities would serve as a means for documenting a teacher's knowledge and skill.

POLICY IMPLICATIONS

If a new status, the board-certified teacher, is introduced into the educational system within the next decade, what consequences might ensue? Specifically, how might various interests begin to make use of this new status? Schools of the future might have both regular teachers and a growing number of board-certified teachers. What difference will this make?

Here we enter the realm of speculation, but a number of possibilities seem likely. First, if localities come to value the new

status and seek to encourage teachers to become board-certified, then they may begin to provide incentives. For example, districts might add a new column to the salary schedule for board certification. Or, they might tie advancement in teaching to board certification. The new status might become a requirement for tenure or for such positions as department chair or master teacher. It could also become a prerequisite for advancement into school administration, depending on the preferences of particular districts. Districts may also establish teacher groups to assist their faculties in preparing for the board assessments.

Board certification could also influence teacher education and higher education faculty. The new assessments may come to influence the curriculum of teacher education, with students practicing the kinds of exercises utilized in the assessment center as part of their preparation. Additionally, schools and colleges of education may encourage at least some of their faculty to become board-certified, particularly those who teach methods courses. There also may be changes in practices in classrooms and schools, as board-certified teachers begin to mentor novice teachers and to collaborate with them on exercises during their certification process.

These developments might occur informally or formally at the district or the state level. Much depends on whether the new status achieves widespread credibility with teachers and with the public. As board certification gains visibility and prominence--becomes, that is, a new and convincing proxy for teacher quality--then policymakers at state and local levels will create incentives and requirements to increase the

numbers of board-certified teachers. It is even possible that the certification standard might influence the licensure standard in some states: state boards of education might tie permanent licensure to board certification. Alternatively, rather than formally adopting the certification standard, states might begin revising their licensure procedures to become board compatible.

These potential developments all raise issues of equity. If past experience with testing is indicative, then disparities in access to board certification may open up along lines of race, class, and locality. If minority teachers fail the assessments in disproportionate numbers and if inner city and rural districts cannot attract their fair share of board-certified teachers, serious doubts will be raised about the value of the process. Board certification could create a two-class system of teachers within schools. Antagonisms could develop between those veteran teachers who are and those who are not board-certified, particularly if the two groups are distinguished by evident social characteristics, such as age, race, or social background.

Much will depend on the processes that arise to prepare teachers for board certification. The national board has stated its commitment to a fair and unbiased assessment. The board will develop training materials and work directly with a range of organizations that may be involved in preparing teachers for board certification. These include, for example, the teacher organizations (NEA and AFT); the subject matter organizations (e.g., the National Council of Teachers of English, the National Science Teachers' Association, the National Council of Social Studies); teacher

educators, including those within historically black colleges; and civil rights groups who have a stake in the equity implications of board certification.

States and districts need not wait for an invitation to work with the national board, however. They can arrange opportunities for teachers who wish to begin preparing for board certification, and, if inequities in access emerge, can target support and resources to groups and locales that have been unable to take full advantage of the new status.

Other developments are also underway in anticipation of board certification. The Educational Testing Service is embarked on a five-year effort to substantially revise the National Teacher Examination (NTE) at least partly in anticipation of (and perhaps parallel with) board certification. Several states, notably Connecticut and California, have initiated a consortium with support from the National Governors' Association for states interested in developing board-compatible licensure procedures. The New Interstate Teacher Assessment and Support Consortium operates out of Stanford University. Its primary objective is to develop a network of state agencies, higher education institutions, researchers, and professional associations committed to aligning new teacher assessments and supports with standards being developed by the National Board for Professional Teaching Standards. A second purpose is to foster interstate collaboration in the development of board-compatible assessments for teacher licensure.

A copy of the consortium's first newsletter is included in the appendix. It contains a brief history of the consortium and a report on consortium membership levels and activities.

Establishment of the National Board for Professional Teaching

Standards will influence teaching in at least two ways. One concerns the introduction of a new status--the board-certified teacher--into the schools, and how states, districts, and schools might use this new status. This development raises issues for state and local policy, for school organization and relationships within schools, for educational equity, and for the allocation and distribution of resources. The second line of influence concerns the reconceptualization of teaching and its assessment, as represented in standards for teaching, the curriculum of teacher education, and the very language used to describe and evaluate teachers. Both are of great moment to the future of teaching and deserve careful attention. Ultimately, though, the proof of this pudding must be in the tasting. If teachers who seek board certification do not find the procedures credible and related to their conceptions of excellence in teaching, if policymakers and citizens do not value the knowledge and skill assessed, and if board-certified teachers do not exemplify technical competence and professional responsibility, then this initiative is likely to stall and have little impact.

This is as it should be. Unlike many recent efforts to improve teaching, board certification is not a mandate. It must prove itself to educators and to the public; this is its cardinal virtue.

REFERENCES

- Carnegie Task Force on Teaching as a Profession. (1986). A nation prepared: Teachers for the 21st century. Washington, D.C.: Carnegie Forum on Education and the Economy.
- Shulman, L. S. (1987a). Assessment for teaching: An initiative for the profession. Phi Delta Kappan, 69(1), 38-44.
- Shulman, L. S. (1987b). Knowledge and teaching: Foundations of the new reform. Harvard Educational Review, 57(1), 1-22.
- Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. Educational Researcher, 15(2), 4-14.
- Shulman, L. S., & Sykes, G. (1986, March). A national board for teaching? In search of a bold new standard. Paper commissioned for the Task Force on Teaching as a Profession, Carnegie Forum on Education and the Economy.
- Wilson, S. M., Shulman, L. S., & Richert, A. E. (1987). "150 different ways" of knowing: Representations of knowledge in teaching. In J. Calderhead (Ed.), Exploring teachers' thinking. London: Cassell.

APPENDIX

The Consortium Report

The Consortium Report

Volume I, Number I

Spring, 1988

New Interstate Teacher Assessment and Support Consortium



The New Interstate Teacher Assessment and Support Consortium is funded by a \$50,500 grant from the National Governors' Association (NGA) for the 15-month period of October 1987 through December 1988. Charter Members of the Consortium

are the Connecticut and California Departments of Education and the California Commission on Teacher Credentialing.

The primary objective of the Consortium is to develop a network among state agencies, institutions of higher education, researchers, and professional associations committed to aligning new teacher assessments and supports with standards being developed by the new National Board for Professional Teaching Standards (hereafter referred to as "Board"). The Teacher Assessment Project (TAP) at Stanford University, funded by the Carnegie Corporation and directed by Professor Lee Shulman, is currently developing prototypes of teacher assessments for Board consideration and is a key part of the Consor-

tium network. (See newsletters from the TAP for background information; the Summer 1988 Consortium Newsletter will bring you up-to-date on the Project's current development work.)

A second purpose of the Consortium is to foster interstate collaboration in the development of Board-compatible assessments for teacher licensure. Consortium Charter Members will be collaborating during this funding period on the development and validation of assessment instruments for teacher licensure. The Memorandum of Understanding (MOU) signed by the Charter Members in April 1988 provides for broader inter-state collaboration in developing new teacher assessment instruments after April 1989. (See "A Brief History of the Consortium" in this newsletter.)

The Consortium Liaison Office at Stanford University - staffed by Dr. Joan Talbert, Robert Polkinghorn, Jr. (Coordinators) and Margaret Finney (Administrative Assistant) - is supported through April, 1989 by the NGA grant, with additional funding from the Connecticut and California Departments of Education.

(Continued on page 2)

HIGHLIGHTS OF MARCH SEMINAR

The first Consortium seminar was held at the Stanford Park Hotel, near Stanford University, on March 7 and 8, 1988. This seminar featured discussions of goals and potentials of the Consortium and presentations on paper and pencil assessments of teachers' pedagogical content knowledge. Participants in the March seminar included state agency representatives from 16 states; representatives from the American Federation of Teachers, the National Education Association and the National Board for Professional Teaching Standards; and about 35 Associates from the research and development community. The thrust of featured presentations and issues raised in discussion are highlighted here...

FORGIONE URGES VISION, PATIENCE, COALESCING

Pat Forgione, Connecticut Department of Education, noted that curriculum quality, instructional quality, school quality and teacher quality are the heart of the Carnegie reform initiative. This vision of reform demands patience, a relief from short-term criteria of improved student outcomes and a commitment to long-term development work.

Connecticut is in a unique position: with leadership willing to wait for ultimate tests of reform; efforts, with stable demographics and a large pool of teachers, and budgetary support for developing and implementing an enlightened and integrated approach to assessing and supporting new teachers.

Forgione called for a coalition around a common vision of reform and inter-state cooperation to build the states' capacity to deliver in the national reform agenda.

(Continued on page 2)

Inside....

History of the Consortium	3
June Seminar.....	4
Consortium Membership and Activities	6

The Consortium Report is a quarterly newsletter of the New Interstate Teacher Assessment and Support Consortium. It is published by the Consortium Liaison Office at Stanford University and edited by Consortium coordinators, Joan E. Talbert, Ph.D. and Robert Polkinghorn, Jr.

(Continued from top page 1)

The Liaison Office is responsible for establishing a communication network among those committed to Consortium goals. In addition to quarterly newsletters, this is promoted by a series of working seminars for Associates to share information about new developments in teacher assessment and support and to explore common interests and potentials for collaboration. The Liaison Office also coordinates and provides technical support for the collaborative activities of the three Charter Members and for similar initiatives which may develop among Consortium Associates.

Consortium goals and activities for the current year center on sharing information about ways of assessing and supporting teachers' "pedagogical content knowledge," or the intersection of subject area knowledge and pedagogical skills. The seminar series and the devel-

The focus on pedagogical content knowledge articulates with an important dimension of assessment prototypes being developed within the Stanford TAP.

opment work of the Charter Members emphasize this domain of professional competence. The focus on pedagogical content knowledge articulates with an important dimension of assessment prototypes being developed within the Stanford TAP. Commitment to this focus, of course, does not rule out consideration of broader issues of measurement in professional assessments or additional criteria for defining, promoting and assessing teaching quality.

The 1988 seminar series addresses alternative formats for assessing teaching skills, with special attention to the domain of pedagogical content knowledge. Each seminar is devoted to a particular assessment format: paper-and-pencil tests, classroom observation and documentation, and assessment center formats. The first was held in March, 1988 (see "Highlights" below), and the others are scheduled for June and September, 1988. (Dates and locations are noted in "A Brief History of the Consortium.") Seminar agenda are designed to promote sharing of information through featured speakers, panels and working groups of seminar participants. Highlights of each seminar will be featured in the quarterly newsletters so that Associates who did not attend can keep abreast of emergent issues and ongoing conversation within the Consortium.

(Continued from bottom page 1)

HUNT AND WRIGHT SEE TURNING POINT IN STATE EDUCATIONAL REFORM

Harvey Hunt, California Department of Education, noted an important transition in educational reform within the State of California. Since 1982 the California Commission on the Teaching Profession (established by the legislature with support from the Hewlett Foundation) directed state attention to the need to support and assess new teachers as part of a comprehensive strategy to reform the teaching profession. This attention to classroom teaching departs from prior reform efforts which raised students' graduation requirements, specified curriculum standards and raised teachers' salaries.

In short, this is a time for unprecedented attention to the task of teaching. It is also a time for new

frontiers of organizational collaboration that will support the training and induction of excellent teachers in a state as large and complex as California.

David Wright, California Commission on Teacher Credentialing, emphasized the importance of an interstate consortium for helping us all to learn collectively. Said Wright: "Rather than inventing a 'new wheel,' we want to share the state approaches to wheel development." Again, the educational reform vision includes collaboration among agencies traditionally isolated from one another.

SHULMAN CALLS FOR A NEW VISION OF ASSESSMENT

Professor Lee Shulman challenged boundaries separating the functions of teacher assessment, preservice training and profes-

sional development. Shulman shared his vision that assessment prototypes developed for the National Board for Professional Teaching Standards would become important resources for teacher education programs and professional development centers. In this view, assessment instruments should provide meaningful conceptions of teaching and opportunities for feedback and mastery.

Shulman's conception of the role of teacher assessments in defining and promoting standards of professional quality challenges policy makers' historic vision of assessment. First, it challenges the view that tests are primarily for screening and thus must be "coach-proof." To the contrary, assessments for National Board certification and, ideally, also for state licensure should provide models and means for professional

(continued on page 4)

A BRIEF HISTORY OF THE CONSORTIUM

The Idea

The possibility of collaborating to support the development and implementation of new state assessments for teacher licensure and certification was discussed for the first time in March, 1987 between Connecticut Commissioner, Gerald Tirozzi and California Superintendent of Public Instruction, Bill Honig. These discussions advanced the notion of an interstate consortium that would recognize and support the implementation of the Carnegie Forum's recommendations to improve the teaching profession.

The work of the consortium is focused on developing performance assessments that measure a teacher's ability to integrate content knowledge with pedagogical understanding to teach students with diverse academic and cultural backgrounds. The multistate consortium brings together a broad spectrum of research and development efforts from across the nation and across constituencies that normally would have little opportunity to share knowledge, plans, and resources focusing on new teacher assessment and support.

An important feature of the consortium is the establishment of a formal liaison capacity linking assessment research and development activity in California and Connecticut with the Carnegie-funded Teacher Assessment Project at Stanford University, the National Board for Professional Teaching Standards and developmental assessment work taking place in other states.

The Resources

The Carnegie Forum on Education and the Economy followed Honig's and Tirozzi's announce-

The work of the consortium is focused on developing performance assessments that measure a teacher's ability to integrate content knowledge with pedagogical understanding to teach students with diverse academic and cultural backgrounds.

ment with keen interest and encouraged the states to submit a proposal to the National Governors' Association for funding to support the liaison capacity. The Carnegie Foundation of New York had already awarded a major grant to the NGA to assist states with the implementation of educational reforms outlined in the Carnegie Forum report, *A Nation Prepared* (1986) and the NGA's own report on education, *Time for Results* (1985).

Citing the link between the research community and the policy implementation agencies as well as potential cost saving features of a multistate consortium, the NGA funded a proposal from Connecticut Governor William O'Neill in May, 1987. A \$50, 500 award enabled the appointment of a consortium coordinator, Joan E. Talbert, Ph.D., a senior educational researcher at Stanford University and an associate coordinator, Robert Polkinghorn, Jr., a doctoral candidate in educa-

tional policy analysis, also at Stanford. Talbert and Polkinghorn are responsible for operationalizing the liaison capacity and coordinating a clearinghouse for teacher assessment and support research at Stanford University.

The Development of the Consortium

In November, 1987 an organizing seminar of Connecticut and California agency representatives met with Professor Lee Shulman of the Stanford Teacher Assessment Project, and a theme and schedule for three broader interstate seminars were formulated. Seminar dates and locations were also set: Seminar I, March 7 and 8, 1988 (near Stanford University); Seminar II, June 16 and 17, 1988 (in Boulder, Colorado), and Seminar III, September 8 and 9, 1988 (in Hartford, Connecticut).

In January, 1988 all Chief State School Officers, state education agencies, professional organizations, and teacher licensing boards were invited to become Associate members in the newly formed Consortium.

In April, 1988, the Connecticut Department of Education, the California Department of Education and the California Commission on Teacher Credentialing formalized a Memorandum of Understanding (MOU) to define a legal foundation for their collaboration. The agreement focuses on the development and validation of assessments and support for teacher licensure which reflect the commitment to performance assessments of teacher subject matter knowledge and instructional skill.

AGENDA FOR JUNE SEMINAR

About the time you receive this newsletter the second Consortium seminar will be taking place in Boulder, CO. The seminar is scheduled for June 16-17 at the Clarion Harvest House Hotel, following the annual ECS Assessment Conference.

The seminar will address both performance assessments of classroom teaching (on June 16) and documentation (on June 17). The agenda includes:

- 1) a dialogue between David Berliner and Gaea Leinhardt on general vs. subject-specific pedagogical skills and on assessment standards for beginning and more experienced teachers;
- 2) a panel of state representatives addressing issues of level of inference in performance assessments;
- 3) a presentation by John Frederickson and Allan Collins on teaching strategies that promote student cognitive development;
- 4) working groups to address performance assessments for preservice training, licensure, professional development, and evaluations for employment and career decisions;
- 5) a presentation by Lee Shulman on plans for developing documentation instruments in the TAP.

6) a report from Joyce McLarty on measurement lessons from the Tennessee experience with documentation

7) a presentation by Edward Haertel on the potentials and pitfalls of using student performance data to assess teachers

Each session will include one or two reactors and time for general discussion.

The seminar agenda promises a stimulating two days. Most important, this second gathering of the Consortium will allow us to continue the conversation begun at Stanford in March on potentials for interstate collaboration in developing new teacher assessments and support.

The Summer issue of this newsletter will feature highlights from the June seminar, as well as progress reports on the Stanford Teacher Assessment Project and Connecticut's work in developing new teacher assessments. Associates may submit items for future newsletters that describe research or development projects of interest to Consortium members. Submission deadline for the Summer issue is August 1.

(Continued from page 2)

growth. Enlightened assessments would shape: teacher education materials; assessment, documentation, and coaching within teacher education programs; and contents of a teacher's portfolio to document his or her career progress and achievements.

Second, Shulman's conception challenges narrow definitions of the knowledge base to be assessed. Instead of asking "what does a teacher need to know?" we should be asking: "what does a teacher need to know to teach a particular subject content to a particular group of students?" The latter question is more consistent with current, contextualized conceptions of teaching competence.

Shulman framed two challenges for the Consortium. He urged us to share knowledge so that assess-

ment technologies and legislative directions can "catch up" with current conceptions of teaching. He also urged us to think of Board-compatible assessments of teachers in the states as elements in a process of professional certification. Documentation of candidates' training activities and associated assessments in addition to information from state licensure procedures and assessments could comprise important evidence for later Board certification decisions. Collaboration among the states to develop enlightened professional assessments holds great promise for meeting these challenges.

PELTON AND MANDEL REPRESENT THE NATIONAL BOARD

Claire Pelton, a teacher member of the National Board for Profes-

sional Teaching Standards, and David Mandel, Board Vice-President for Policy Development, each spoke to seminar participants on challenges facing the new National Board.

Pelton emphasized the nature of bottom-up reform called for by the Carnegie Report, *A Nation Prepared* (1986), in contrast to the top-down reforms which preceeded it. Apart from the voluntary certification system, Board efforts will focus on teachers' participation in establishing their working conditions and mobilizing under-represented groups to enter the teaching profession. Pelton thus highlighted the Board's commitment to promoting local support and authority for teachers and a professional labor force that is demographically representative.

Mandel described the Board as a "working," rather than a "rubber-

stamp," board and outlined some of the issues being addressed as the group grapples with definitions of Board standards and assessment practices. For instance: what are the training and experience prerequisites for Board certification?; what assessment technologies should be invested in most heavily?; at what level should Board certification be pitched?

Mandel also talked about the significance and potentials of the Consortium. He portrayed the reform of teacher licensure assessments as a substantial challenge to the states and noted that a major contribution of the Consortium would be to push such reforms ahead. Mandel argued that compatible standards for state licensing and Board certification would yield mutual gains. In particular, they would define common standards for teacher education and professional development that would enhance the quality and authority of the profession. He cautioned the Consortium against focusing too narrowly on content-specific pedagogy. The challenge of developing better kinds of assessments, tied to rich conceptions of teaching competence, would take us beyond this domain of knowledge and skill.

TOWARD A NEW NATIONAL TEACHER'S EXAMINATION

Carol Dwyer, ETS officer charged with developing the blueprint for a new generation of the NTE, brought us up to date on the progress and issues surfacing within her project. The target date for the new NTE is 1992.

During the next few months, Dwyer and her colleagues will continue researching new developments in conceptions of good teaching and in teacher testing. An important challenge is to broaden definitions of test validity to ask "is the content we are assessing the right content?" while

Mandel argued... compatible standards for state licensing and Board certification would yield mutual gains.

also satisfying traditional criteria of validity and reliability. A future goal of ETS is to design assessments that serve individuals as well as institutions.

Dwyer highlighted a number of measurement and practical issues being addressed during this planning phase for the new NTE. Measurement issues include: how to deal with the region of uncertainty entailed in setting cut scores at any standard of test performance, and how to design assessment settings that allow each individual to show what they know how to do and satisfy institutions' standards of validity and reliability. Practical issues concern: how to reach enough and the right kind of consensus on assessment content before moving ahead with development, how to manage the awesome complexity of assessing subject area pedagogical knowledge without syntheses of research in this area, how to support the substantial costs entailed in major assessment reforms, and how to manage the transition to a new generation of the NTE.

POPHAM ON DEFENSIBLE TEACHER TESTS

Professor James Popham, of U.C.L.A. and IOX Associates, pointed to legal defense as a key criterion for test development. The issue of defensible tests concerns the content of the test, not the production of items. What evidence can we present that a candidate for teacher licensure will perform better in the classroom if they perform well on a test; conversely what empirical grounds warrant denying licen-

sure to a person who does very poorly on the test? In Popham's view, the knowledge base concerning a teacher's pedagogical content knowledge is too slim to support defensible tests. The knowledge base he deems critical is data on teaching effects on student outcomes - improvements in knowledge, skills and attitudes.

Popham discussed and shared some of the assessment items that IOX is developing for Connecticut. The items are part of a multiple choice examination of prospective elementary teachers intended to tap content, pedagogy and the nexus of the two (pedagogical content knowledge). A portion of the examination uses videotapes of professionally-staged classroom instruction as the referent for multiple choice questions presented in a booklet. We were able to view one simulation and the corresponding test items focused on pedagogical practices.

Lively discussion followed Popham's presentation. Seminar participants were fascinated by the video vignette format. Many suggested more elaborate test items to tap a broader range of knowledge domains or open-ended responses to assess the observed instruction.

Shulman challenged the process-product research base as the sole defense for teacher tests, arguing that normative standards could be developed and defended by accomplished professionals. The issue of legal defensibility in test development emerged as an important issue for further discussion within the Consortium.

KAHL ATTENDS TO FIT BETWEEN ITEM FORMAT AND PURPOSE

Stuart Kahl of Advanced Systems urged us to take a complementary view of alternative assessment formats and to match item format with purposes of the assessment. He noted that multiple choice items call upon test-takers to evaluate given alternatives, open-

(Continued on top page 6)

(Continued from page 5)

ended items call for evaluating and generating alternatives, and performance assessments call additionally for executing preferred alternatives. By implication, the formats would complement one another in evaluations of professional knowledge, judgment and practices.

Kahl noted the trade-off in development efforts associated with the alternative formats. The multiple choice format requires investment in developing distractors, while open-ended paper and pencil formats and performance assessments require investment in the scoring guide.

In discussing common sources of test criticisms Kahl emphasized the importance of developing items in any format that tap knowledge or skills that an individual has had an opportunity to learn and will regard as valuable. Fair tests additionally would draw upon

multiple measures and look broadly at evidence relevant to the assessment.

FREDERICKSON OUTLINES FEATURES OF A GOOD TEST

Norman Frederickson, an ETS researcher and pioneer in developing the in-basket test, shared his standards for developing and evaluating a test. A good test will: 1) elicit construction of responses, rather than response selection; 2) be standardized to allow for interpretation of scores; 3) satisfy usual standards of validity and reliability, e.g., at least 25 items for a reliable score; 4) be coachable; 5) create reasonable simulations of problems you would like candidates to deal with; 6) be useful not just for selection or promotion, but also for evaluating and revising educational programs, counseling and individual decision-making; 7) be based on a thorough task analysis in the

A good test will... elicit construction of responses

domain in which the test will be used; and, 8) be economically feasible

Frederickson noted the challenge of scoring responses to such a test and described a general scoring process. The process relies heavily upon expert review and judgment. Experts first review sets of field test responses and put them into categories. The categories are defined and expert judges assign values to the quality range within each category. Coders then assign responses to the categories and apply quality values to yield a score for each response.

REPORT ON CONSORTIUM MEMBERSHIP AND ACTIVITIES

Charter Members

During 1987-88, the Charter Members of the Consortium are: The Connecticut and California Departments of Education and the California Commission on Teacher Credentialing. The Stanford University Teacher Assessment Project (TAP), under the direction of Professor Lee Shulman, is considered an ex-officio Charter Member. Together, the Charter Members comprise the Consortium Governing Board.

As Charter Members, Connecticut and California have already established an agenda for collaboration. A formal agreement between the states specifies a shared set of activities that facilitates the development and field testing of the first components of Connecticut's new teacher assessment continuum. This agreement and action plan may serve as a model for subsequent collaboration among other Consortium members.

Full Members

This is a non-operational category during the 1987-88 planning year of the Consortium. However, beginning in May, 1989, full membership is open to any state educational agency and state and national boards responsible for licensing and certifying teachers.

Full members must: (1) agree to participate as an active member in the development of new teacher assessment methods and instruments for licensure, staff development, research and employment purposes; and, (2) endorse the fundamental premise of the Consortium: i.e., the need to develop assessment methodologies and supports which include new teachers' pedagogical content knowledge.

Only Charter and Full members have voting rights on the Consortium Governing Board.

Associate Members

During the planning year of the Consortium, all state educational agencies, state and national licensing boards, individuals and institutions participating in the Consortium are considered Associates.

In addition to endorsing the Consortium goals, Associates must agree to receive and provide information about new teacher assessment methods, instruments and related development issues.

Current Associates representing state educational agencies and/or state and national licensing agencies may apply to the Consortium Governing Board for "Full Member" status one calendar year from the execution of the Memorandum of Understanding, i.e., April, 1989

State Agencies/Licensing Boards

Agencies and/or teacher licensing boards from thirty-one states are currently represented in the Consortium. While each agency or board undoubtedly has individual reasons for participating in the Consortium, it is apparent that there is a strong collective interest in developing and implementing alternative ways of licensing and supporting new teachers. The Consortium provides a mechanism through which states can learn from each other and hopefully collaborate to facilitate this process.

Individual and Institutional Associates

Approximately 115 individual and organizational Associates are represented on the Consortium membership roster. These individuals and organizations represent diverse interests and areas of expertise. They include:

Professional organizations (National Board for Professional Teaching Standards, the American Federation of Teachers, the National Education Association and State Educational Associations);

Educational testing organizations (Educational Testing Service, National Evaluation Systems, IOX);

Research and development organizations (Far West Laboratory for Educational Research, National Center on Teacher Education at Michigan State University, Center for the Study of Learning at the University of Pittsburgh);

School districts (San Jose Unified in California; and Syracuse School District in New York); and,

Institutions of higher education (University of California at Berkeley, Stanford University, City College—New York, Florida A & M University, University of Washington).

These Associates share a common interest in improving new teacher assessment and support and many are engaged in research or development efforts directed towards this goal.

Seminar Participation for Associates

No membership fee is required of Consortium Associates during the planning year. The only monetary cost to Associates is institutional support for seminar participation.

Associates who are state education agencies and teacher licensing boards are expected to support a representative at all Consortium seminars scheduled for the year.

Research and development Associates are encouraged to attend those seminars relevant to

their work and in which they can contribute resources to development interests and efforts of state agencies colleagues. The large and growing membership of the Consortium requires Associates from the research and development community to self-select on the above criterion for seminar participation in order to maintain the capacity for exchange in the working seminars.

Sixteen state agency Associates sent representatives to the first seminar in March. These states included: *Arizona, Arkansas, California, Connecticut, Maine, Maryland, Massachusetts, Minnesota, Missouri, New York, Oregon, Rhode Island, Vermont, Virginia, Washington and Wisconsin*. In addition, 35 individual and institutional Associates attended and participated in the March seminar.

The second seminar in Boulder, Colorado will include seven additional state agencies. These states are: *Alaska, Florida, Georgia, Michigan, North Carolina, Pennsylvania, and South Carolina*. Approximately 40 individual and institutional Associates will join the state agency Associates in Boulder.

Other state agency Associates include: *Colorado, Hawaii, Idaho, Kansas, New Hampshire, New Mexico, North Dakota, Ohio, Tennessee, and West Virginia*.

THE NEW INTERSTATE TEACHER ASSESSMENT AND SUPPORT CONSORTIUM

Consortium Liaison Office

CERAS 402

Stanford University

Stanford, California 94305

415/723-4972

NEW INTERSTATE TEACHER ASSESSMENT AND SUPPORT CONSORTIUM

Consortium Governing Board

California State Department of Education

**Bill Honig, Superintendent of
Public Instruction**

**Harvey Hunt, Deputy Superinten-
dent**

Laura Wagner, Administrator

Connecticut State Department of Education

**Gerald Tirozzi, Commissioner of
Education**

**Pascale D. Forgione, Jr., Chief,
Office of Research and Evaluation**

**Raymond Pechione, Education
Consultant**

California Commission on Teacher Credentialing

Alice Petrossian, Chair

**Richard Mastain, Executive
Secretary**

**Richard Majetic, Administrator of
Examinations and Research**

**David Wright, Director of Profes-
sional Services**

Issue Paper Feedback Form

Please remove this form and return it to AEL.

	Yes	Somewhat	No
Information was useful	3	2	1
Challenges existing practice	3	2	1
Raises new issues or perspectives	3	2	1
Includes implications for policy	3	2	1

Do you plan to use the information contained in this report? ☐ Yes ☐ No

If so, how? _____

Name (optional) _____

Address _____

Thank you.

Please fold and mail.

Postage
Required

TO: Policy & Planning Center
Appalachia Educational Laboratory
Post Office Box 1348
Charleston, West Virginia 25325